

Abstract:

The present invention provides a method of making polycarbonate oligomers, polycarbonate, molded articles formed from polycarbonate, and an apparatus for making polycarbonate. An oligomer mixture is first prepared by the steps of providing an equilibration system comprising a vessel, a reaction mixture contained within the vessel, and means for mixing the reaction mixture contained within the vessel wherein the reaction mixture comprises a melted activated diaryl carbonate composition, and a catalyst present in sufficient amount to initiate an oligomerization reaction between a dihydroxy composition and the activated diaryl carbonate to form polycarbonate oligomers. The method further includes the steps of introducing a melted dihydroxy composition to the reaction mixture contained within the equilibration system, maintaining the reaction mixture contained within the vessel at an oligomerization temperature, said oligomerization temperature being below the melting point the dihydroxy composition, and sufficiently high to allow formation of a homogeneous melt within the vessel, and continuously drawing off a product stream from the equilibration system, wherein the product stream comprises a polycarbonate oligomer mixture. This polycarbonate oligomer mixture is suitably used as a feed stock for producing polycarbonate in a polycondensation system. The polycarbonate is suitably used for the preparation of molded articles.